

Amendment to the Claims

The following listing of claims will replace all prior versions and listings of claims.

Listing of Claims:

1. (Previously Presented) An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
 - (a) a nucleotide sequence encoding the FcR-V polypeptide having the amino acid sequence at positions -16 to 498 of SEQ ID NO:10 or the complete amino acid sequence encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (b) a nucleotide sequence encoding the FcR-V polypeptide having the amino acid sequence at positions -15 to 498 of SEQ ID NO:10 or the complete amino acid sequence excepting the N-terminal methionine encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (c) a nucleotide sequence encoding the mature form of the FcR-V polypeptide having the amino acid sequence at positions 1 to 498 in SEQ ID NO:10, or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (d) a nucleotide sequence encoding a polypeptide comprising the extracellular domain of the FcR-V polypeptide having the amino acid sequence at positions 1 to 343 in SEQ ID NO:10 or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (e) a nucleotide sequence encoding a polypeptide comprising the transmembrane domain of the FcR-V polypeptide having the amino acid sequence at positions 344 to 364 in SEQ ID NO:10 or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (f) a nucleotide sequence encoding a polypeptide comprising the intracellular domain of the FcR-V polypeptide having the amino acid sequence at positions 365 to 498 in SEQ ID NO:10 or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;
 - (g) a nucleotide sequence encoding a soluble FcR-V polypeptide having the extracellular and intracellular domains but lacking the transmembrane domain; and

(h) a nucleotide sequence complementary to any of the nucleotide sequences in (a) through (g) above.

2-18. (Canceled)

19. (Previously Presented) An isolated FcR-V polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:

(a) the amino acid sequence of the complete FcR-V polypeptide having the amino acid sequence positions -16 to 498 of SEQ ID NO:10 or the complete FcR-V amino acid sequence encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(b) the amino acid sequence of the complete FcR-V polypeptide having the amino acid sequence positions -15 to 498 of SEQ ID NO:10 or the complete FcR-V amino acid sequence excepting the N-terminal methionine encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(c) the amino acid sequence of the mature FcR-V polypeptide having the amino acid sequence at positions 1 to 498 in SEQ ID NO:10, or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(d) the amino acid sequence of the extracellular domain of the FcR-V polypeptide having the amino acid sequence at positions 1-343 in SEQ ID NO:10, or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(e) the amino acid sequence of the transmembrane domain of the FcR-V polypeptide having the amino acid sequence at positions 344-364 in SEQ ID NO:10, or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(f) the amino acid sequence of the intracellular domain of the FcR-V polypeptide having the amino acid sequence at positions 365-498 in SEQ ID NO:10, or as encoded by the FcR-V cDNA clone contained in ATCC Deposit No. 209100;

(g) the amino acid sequence of a soluble FcR-V polypeptide comprising the extracellular and intracellular domains, but lacking the transmembrane domain.

20. (Canceled)

21. (Previously Presented) An isolated antibody that binds specifically to an FcR-V polypeptide of claim 19.

22. (Canceled)
23. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:
- (a) a protein consisting of amino acid residues -16 to 498 of SEQ ID NO:10;
 - (b) a protein consisting of amino acid residues 1 to 498 of SEQ ID NO:10; and,
 - (c) a protein consisting of the extracellular domain of the FcR-V polypeptide having the amino acid sequence at positions 1 to 343 in SEQ ID NO:10.
24. (New) The antibody or fragment thereof of claim 23 that specifically binds protein (a).
25. (New) The antibody or fragment thereof of claim 23 that specifically binds protein (b).
26. (New) The antibody or fragment thereof of claim 23 that specifically binds protein (c).
27. (New) The antibody or fragment thereof of claim 24 that specifically binds protein (b).
28. (New) The antibody or fragment thereof of claim 23 which is a human antibody.
29. (New) The antibody or fragment thereof of claim 23 which is a monoclonal antibody.
30. (New) The antibody or fragment thereof of claim 23 which is a polyclonal antibody.
31. (New) The antibody or fragment thereof of claim 23 which is selected from the group consisting of:
- (a) a chimeric antibody;
 - (b) a humanized antibody;
 - (c) a single chain antibody; and
 - (d) a Fab fragment.

32. (New) The antibody or fragment thereof of claim 23 which is labeled.
33. (New) The antibody or fragment thereof of claim 23 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.
34. (New) The antibody or fragment thereof of claim 23 wherein said antibody or fragment thereof specifically binds to said protein in an Enzyme Linked Immunosorbent Assay (ELISA).
35. (New) An isolated cell that produces the antibody or fragment thereof of claim 23.
36. (New) A hybridoma that produces the antibody or fragment thereof of claim 23.
37. (New) A method of detecting Fc Receptor-V (FcR-V) protein in a biological sample comprising:
 - (a) contacting the biological sample with the antibody or fragment thereof of claim 23; and
 - (b) detecting the FcR-V protein in the biological sample bound to the antibody or fragment thereof of claim 23.
38. (New) The method of claim 37 wherein the antibody or fragment thereof is a monoclonal antibody.
39. (New) The method of claim 37 wherein the antibody or fragment thereof is a polyclonal antibody.
40. (New) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:
 - (a) a protein consisting of the full-length polypeptide encoded by the cDNA contained in ATCC Deposit Number 209100;

- (b) a protein consisting of the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209100; and,
 - (c) a protein consisting of the extracellular domain of the FcR-V polypeptide encoded by the FcR-V cDNA in the FcR-V plasmid contained in ATCC Deposit Number 209100.
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- 41. (New) The antibody or fragment thereof of claim 40 that specifically binds protein (a).
 - 42. (New) The antibody or fragment thereof of claim 40 that specifically binds protein (b).
 - 43. (New) The antibody or fragment thereof of claim 40 that specifically binds protein (c).
 - 44. (New) The antibody or fragment thereof of claim 41 that specifically binds protein (b).
 - 45. (New) The antibody or fragment thereof of claim 40 which is a human antibody.
 - 46. (New) The antibody or fragment thereof of claim 40 which is a monoclonal antibody.
 - 47. (New) The antibody or fragment thereof of claim 40 which is a polyclonal antibody.
 - 48. (New) The antibody or fragment thereof of claim 40 which is selected from the group consisting of:
 - (a) a chimeric antibody;
 - (b) a humanized antibody;
 - (c) a single chain antibody; and
 - (d) a Fab fragment.
 - 49. (New) The antibody or fragment thereof of claim 40 which is labeled.

50. (New) The antibody or fragment thereof of claim 40 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.
51. (New) The antibody or fragment thereof of claim 40 wherein said antibody or fragment thereof specifically binds to said protein in an Enzyme Linked Immunosorbent Assay (ELISA).
52. (New) An isolated cell that produces the antibody or fragment thereof of claim 40.
53. (New) A hybridoma that produces the antibody or fragment thereof of claim 40.
54. (New) A method of detecting Fc Receptor-V (FcR-V) protein in a biological sample comprising:
 - (a) contacting the biological sample with the antibody or fragment thereof of claim 40; and
 - (b) detecting the FcR-V protein in the biological sample bound to the antibody or fragment thereof of claim 40.
55. (New) The method of claim 54 wherein the antibody or fragment thereof is a monoclonal antibody.
56. (New) The method of claim 54 wherein the antibody or fragment thereof is a polyclonal antibody.
57. (New) An isolated antibody or fragment thereof that specifically binds a FcR-V protein expressed on the surface of cells in a cell culture wherein the cells in said culture comprise a polynucleotide encoding amino acids 1 to 498 of SEQ ID NO:10 operably associated with a regulatory sequence that controls the expression of said polynucleotide

58. (New) The antibody or fragment thereof of claim 57 which is a human antibody.
59. (New) The antibody or fragment thereof of claim 57 which is a monoclonal antibody.
60. (New) The antibody or fragment thereof of claim 57 which is a polyclonal antibody.
61. (New) The antibody or fragment thereof of claim 57 which is selected from the group consisting of:
- (a) a chimeric antibody;
 - (b) a humanized antibody;
 - (c) a single chain antibody; and
 - (d) a Fab fragment.
62. (New) The antibody or fragment thereof of claim 57 which is labeled.
63. (New) The antibody or fragment thereof of claim 57 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.
64. (New) The antibody or fragment thereof of claim 57 wherein said antibody or fragment thereof specifically binds to said protein in an Enzyme Linked Immunosorbent Assay (ELISA).
65. (New) An isolated cell that produces the antibody or fragment thereof of claim 57.
66. (New) A hybridoma that produces the antibody or fragment thereof of claim 57.
67. (New) A method of detecting Fc Receptor-V (FcR-V) protein in a biological sample comprising:
- (a) contacting the biological sample with the antibody or fragment thereof of claim 57;
 - and

- (b) detecting the FcR-V protein in the biological sample bound to the antibody or fragment thereof of claim 57.
68. (New) The method of claim 67 wherein the antibody or fragment thereof is a monoclonal antibody.
69. (New) The method of claim 67 wherein the antibody or fragment thereof is a polyclonal antibody.
70. (New) An isolated antibody or fragment thereof that specifically binds a FcR-V protein expressed on the surface of cells in a cell culture wherein the cells in said culture comprise the mature form of the polypeptide encoded by the cDNA contained in ATCC Deposit Number 209100 operably associated with a regulatory sequence that controls the expression of said polynucleotide .
71. (New) The antibody or fragment thereof of claim 70 which is a human antibody.
72. (New) The antibody or fragment thereof of claim 70 which is a monoclonal antibody.
73. (New) The antibody or fragment thereof of claim 70 which is a polyclonal antibody.
74. (New) The antibody or fragment thereof of claim 70 which is selected from the group consisting of:
- (a) a chimeric antibody;
 - (b) a humanized antibody;
 - (c) a single chain antibody; and
 - (d) a Fab fragment.
75. (New) The antibody or fragment thereof of claim 70 which is labeled.

76. (New) The antibody or fragment thereof of claim 70 wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.
77. (New) The antibody or fragment thereof of claim 70 wherein said antibody or fragment thereof specifically binds to said protein in an Enzyme Linked Immunosorbent Assay (ELISA).
78. (New) An isolated cell that produces the antibody or fragment thereof of claim 70.
79. (New) A hybridoma that produces the antibody or fragment thereof of claim 70.
80. (New) A method of detecting Fc Receptor-V (FcR-V) protein in a biological sample comprising:
- (a) contacting the biological sample with the antibody or fragment thereof of claim 70; and
 - (b) detecting the FcR-V protein in the biological sample bound to the antibody or fragment thereof of claim 70.
81. (New) The method of claim 80 wherein the antibody or fragment thereof is a monoclonal antibody.
82. (New) The method of claim 80 wherein the antibody or fragment thereof is a polyclonal antibody.